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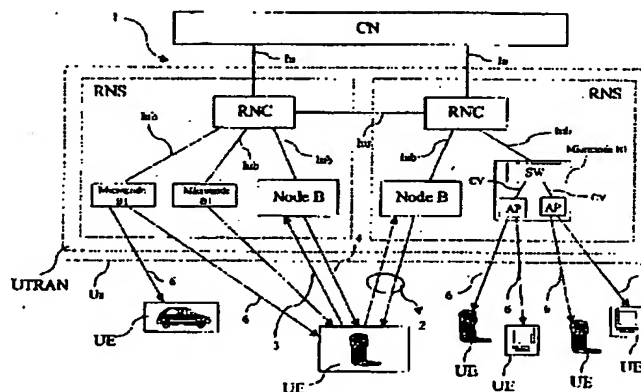
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(54) Title: **RADIOTELEPHONY NETWORK WITH MULTI-CARRIER PACKET DATA TRANSMISSION**



(57) Abstract: The present invention relates to a radio telephony network (1) supporting at least one link of a radio channel (6) for a packet data transmission service. The radio telephony network (1) comprises a plurality of network controllers (RNC). Each network controller (RNC) is connected, via an interface  $I_{ub}$ , to at least one base radio station (B-node) supervising at least one macrocell (5a). The radio telephony network (1) additionally comprises at least one base radio microstation (B1-micronode) connected to the network controller (RNC) via an interface  $I_{ub}$  of the same type as that connecting the base radio station (B-node) to said controller. The base radio microstation (B1-micronode) supervises at least one microcell (5b) incorporated in at least one macrocell (5a). The base radio microstation (B1-micronode) provides the packet data transmission service in the microcell (5b) on the link of the radio channel (6), preferably using multicarrier radio access. The multi-carrier radio access is preferably of the OFDM type.



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